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09/844,968	04/27/2001	Joseph P. Scannell	USB-001.02	1661

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FOLEY HOAG, LLP  
PATENT GROUP, WORLD TRADE CENTER WEST  
155 SEAPORT BLVD  
BOSTON, MA 02110

EXAMINER

LE, TOAN M

ART UNIT PAPER NUMBER

2863

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/844,968

Applicant(s)

SCANNELL, JOSEPH P.

Examiner

Toan M Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/03 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-17, 30, 33, 35, and 38 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 16, line 2, "means for calculating risk probability", it is not clearly pointing out how to calculate risk probability.

As to claim 17, lines 1-3, "means for calculating risk probability uses a weighted risk function to create a ranking of risk probability", it is not clearly pointing out how to calculate risk probability uses a weighted risk function to create a ranking of risk probability.

Referring to claim 30, lines 10-13, "to identify exceeded threshold; identifies structures corresponding to any exceeded thresholds; and prioritizes the identified structures based on the priorities of the exceeded thresholds", it is not clearly what exceeded thresholds mean.

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As to claim 33, lines 2-3, “exceeded threshold”, it is not clear what exceeded threshold means.

Referring to claim 35, lines 8-10, “exceeded thresholds”, it is not clear what exceeded thresholds mean.

As to claim 38, lines 2-4, “exceeded threshold”, it is not clear what exceeded threshold mean.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 and 18-39 are rejected under 35 U.S.C. 102(b) as being anticipated by “Bridge-Scour Data Management System User’s Manual”, Landers et al. (Referred hereafter Landers et al.).

Referring to claim 1, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature (page 1, Abstract, 1<sup>st</sup> paragraph) comprising: at least one database (page 1, 2<sup>nd</sup> column, Structure of Data Sets section: lines 1-3) for receiving and storing data about the structure wherein the stored data includes structural data about the structure (page 1, Abstract, 1<sup>st</sup> and 3<sup>rd</sup> paragraphs); at least one data source for providing data about the structure (page 1, 2<sup>nd</sup> column, Structure of Data Sets section: lines 1-11); a communication network for transmitting data about the structure from the at least one data source to the database or to the user interface and for transmitting from the database to

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the user interface (page 1, 2<sup>nd</sup> column: lines 23-25; page 8, figure 5); the user interface for presenting to a user data about the structure transmitted from the at least one database or the at least one data source (page 1, 2<sup>nd</sup> column, lines 7-9; page 8, figure 5).

As to claims 2, 21, 26, 31, and 36 Landers et al. disclose a computer system and a method to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the data source provides hydrological data, meteorological data, geological data or device data (page 1, 2<sup>nd</sup> column, last paragraph; and page 2, 1<sup>st</sup> column, 1<sup>st</sup> paragraph).

Referring to claim 3 Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the interface presents hydrological data, meteorological data, structural data, environmental data, geographical data or device data (page 8, figure 5).

As to claim 4, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the interface receives and displays real-time data from the data source (page 8, figure 5).

Referring to claim 5, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the data source provides environment data selected from the group consisting of soil, vegetarian, river, hydrological, coastal, tidal and seismic data (page 1, 2<sup>nd</sup> column, last paragraph; page 2, 1<sup>st</sup> column, 1<sup>st</sup> paragraph).

As to claims 6, 22, 27, 32, and 37, Landers et al. disclose a computer system and a method to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the data source provides meteorological data selected from the group consisting

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of radar, tide, snow and warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, or scour data (page 1, 2<sup>nd</sup> column, Structure of Data Sets: lines 8-10; page 8, figure 5; page A-29, figures A21-23).

Referring to claim 7, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the data source provides structural data selected from the group consisting of structural detail, attributes, plans, inspection reports, maintenance memos and bridge history data (page 1, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph).

As to claim 8, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the interface presents data from at least a first and a second data source (page 8, figure 5).

Referring to claim 9, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the interface presents data by displaying a graphical representation of data from the first data source onto data from the second data source (page 8, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph; page B-18, figure B-3).

As to claim 10, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the first data is a map showing a meteorological condition and the second data is a map showing the location of the structure (page 8, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph).

Referring to claims 11-13, 23-24, 28-29, 33-34, and 38-39, Landers et al. disclose a computer system and a method to present to a user interface data about an artificial structure in or over a hydrological feature further comprising a means for prioritizing the data and a means

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for presenting a warning signal, which is a telephone call, an email, a fax or an instant message to a user by means for setting a threshold on the data such that when the data exceeds the threshold a high warning signal is sent to the user or a central site (page 1, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph; page 8, figure 5; page A-5, Table A-4).

As to claim 14, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature wherein the user interface comprises: a general map of an area, showing hydraulic structures and hydrological features (page 8, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph), a second map showing detail such as the population density, detouring options for traveling public, emergency facilities, existing evacuation routes, and real-time location of safety personnel responding to the events (page 1, 1<sup>st</sup> column, Abstract, 1<sup>st</sup> paragraph; page 1, 1<sup>st</sup> column, Introduction section: lines 6-9; page A-13, figure A-8; page A-14, Table A-10), and a comparative chart of a threshold for the area that has caused a warning signal to be sent and a normal or expected data for the area (page 1, 2<sup>nd</sup> column, lines 17-20 and 2<sup>nd</sup> paragraph).

Referring to claim 15, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature wherein the user can select the maps and detail to be displayed (page 8, 2<sup>nd</sup> column, 2<sup>nd</sup> paragraph).

As to claim 18, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein a user profile determines the data to be presented to the user (page A-10, figure A-6).

Referring to claim 19, Landers et al. disclose a computer system to present to a user interface data about an artificial structure in or over a hydrological feature, wherein the stored

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data includes hydrological data, meteorological data, structural data, environmental data, geographical data or device data (page 1, 1<sup>st</sup> column, Abstract, 1<sup>st</sup> paragraph).

As to claim 20, Landers et al. disclose a system for monitoring an artificial structure in or over a hydrological feature comprising: a computer in communication with a data source which provides measurement data representative of at least one measurement of an environmental condition affecting the structure; and a database which stores a predetermined threshold for the measurement data, wherein the computer compares the measurement data with the predetermined threshold and communicates an alert when the measurement data exceeds the threshold (page 1, 2<sup>nd</sup> column, lines 17-20; page 1, 2<sup>nd</sup> column, Structure of Data Sets section: 1<sup>st</sup> paragraph; page 8, figure 5).

Referring to claim 25, Landers et al. disclose a method for monitoring an artificial structure in or over a hydrological feature comprising: receiving, over a communications network, measurement data representing at least one measurement of an environmental condition affecting the structure; storing a predetermined threshold for the measurement data in a database; comparing the predetermined threshold with the measurement data; and communicating an alert, via an interface, when the measurement data exceeds the threshold (page 1, 2<sup>nd</sup> column, lines 17-20; page 1, 2<sup>nd</sup> column, Structure of Data Sets section: 1<sup>st</sup> paragraph; page 8, figure 5).

As to claims 30 and 35, Landers et al. disclose a system and a method for prioritizing artificial structures in or over hydrological features comprising: a computer in communication with data sources which provide measurement data representing at least one measurement of an environmental condition associated with a plurality of hydraulic structures; at least one database which stores predetermined thresholds corresponding to the measurement data, wherein a



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threshold has an associated priority and structure, wherein the computer compares measurement data from one or more data sources with corresponding thresholds to identify exceeded thresholds; identifies structures corresponding to any exceeded thresholds; and prioritizes the identified structures based on priorities of the exceeded thresholds (page 1, 2<sup>nd</sup> column, lines 17-20; page 1, 2<sup>nd</sup> column, Structure of Data Sets section: 1<sup>st</sup> paragraph; page 8, figure 5).

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

“Local Scour around Bridge Piers”, Shen et al., Journal of the Hydraulics Division, Vol. 95, No. HY6, 1969, Papers 1919-1940

“Scour at Bridges-Detailed Data Collection During Floods”, Mueller, Proceedings of the Federal InterAgency Sedimentation Conference, 1996, Vol. 1

“Bridge Scour Evaluation: Screening, Analysis, and Countermeasures”, Kattell et al., USDA Forest Service, September 1998

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan M Le whose telephone number is (703) 305-4016. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M..

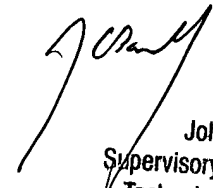
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Toan Le

October 24, 2003



John Barlow  
Supervisory Patent Examiner  
Technology Center 2800